Matt

Nevada Goldfields Inc.
Barite Hill Project

POB 1530
McCormick, SC 29835
USA Telephone: 864-443-2222
USA Fax: 864-443-2187

May 12, 1999

SCDHEC
Bureau of Solid and Hazardous Waste
2600 Bull Street
Columbia, SC 29201
Attn: Van Keisler

RE: Industrial Solid Waste Landfill Permit # 332338 – 1601
Semi Annual Monitor Well Results

Dear Mr. Van Keisler:

Enclosed are two copies of the monitor well results for the first period 1999. The following observations were made for each well:

A3 – All the constituents were within the calculated tolerance levels.

B2 – All the constituents were within the calculated tolerance levels.

D3 – All the constituents were within the calculated tolerance levels.

F3 - All the constituents were within the calculated tolerance levels.

GW5 – All the constituents were within the calculated tolerance levels.

GW6 – All the constituents were within the calculated tolerance levels.

L2 – All the constituents were within the calculated tolerance levels.

N – All the constituents were within the calculated tolerance levels.

O – Sulfate was 14.14 higher than the calculated tolerance limit.

After reviewing the data, it has been determined no adverse impact of the groundwater has occurred.

If you have any questions, please contact me at (864) 443 – 2222.

Sincerely,

Scott A. Wilkinson
Project Manager

Cc: Frank Filas – Corporate Environmental Manager

file:scdhecvk051299

GAULT
Geological Services

1506 Wesley Street
McKeesport, PA 15132
Phone: 412-673-3063
Fax: 412-673-4804
E-Mail: hgault@usaor.net

May 7, 1999

Project No. 94-1001

Mr. Scott Wilkinson
Nevada Goldfields, Inc.
Post Office Box 1530
McCormick, SC 29835

First Quarter 1999 and 1998 Annual Summary
Hydrogeologic Evaluation of Groundwater Flow and Rate
Barite Hill Gold Mine
McCormick, South Carolina

Dear Mr. Wilkinson:

Condition 3b of Industrial Solid Waste Landfill Permit IWP - 3323338-1610 issued by the office of Environmental Quality Control within the Bureau of Solid and Hazardous Management of the Department of Health and Environmental Control requires that a Registered Professional Geologist determine if the ground-water monitoring at the Barite Hill Gold Mine complies with the requirements of Condition 6. Additionally, Condition 7a requires that the Second Semi-Annual Report should include an annual summary, as well as, a determination of the compliance with Condition 6 monitoring requirements.

I have evaluated the monitoring well data recorded during the First Quarter of 1999 (the second semi-annual event of 1998) as measured in February, 1999 and determined that the ground-water levels, with the exception of well A3, are within the range of historical limits measured since the monitoring well system has been installed. All show slight fluctuations relative to historical data. The well network continues the meet the requirements of Condition 6 in that wells F3 and A3 remain upgradient and the rest of the monitoring system is downgradient. Well A3 exhibits water levels above historical levels. It appears that the water table near Well A3 is being effected by a nearby storm-water retention pond. Nevertheless, Well A3 still remains upgradient and the Condition 6 still continues to be met.

The measurements taken during from 1991 through February 1999 are presented graphically as Figure 1. Only well A3 exhibits a remarkable deviation from measurements taken in prior years. The ten-foot increase in water levels in wells in well A3 is likely in response to the a nearby storm-water retention pond.

Excluding the localized effect of the storm-water retention pond near Well A-3, the ground-water gradient measures 0.020 in the First Quarter of 1999. This compares to a range of gradients of 0.011 in the third Quarter of 1992 and 0.115 in the Second Quarter of 1993. The gradient is shallower where the original ground surface is flatter and steeper where the original ground surface is steeper.

The monitoring well network has always met the requirements of permit Condition 6, as wells A-3 and F-3 have always been upgradient. Figure 2 is an equipotential contour map of the ground-water surface in the First Quarter of 1999.

Sincerely,
Gault Geological Services

Howard W. Gault, PG
South Carolina License No. 1026

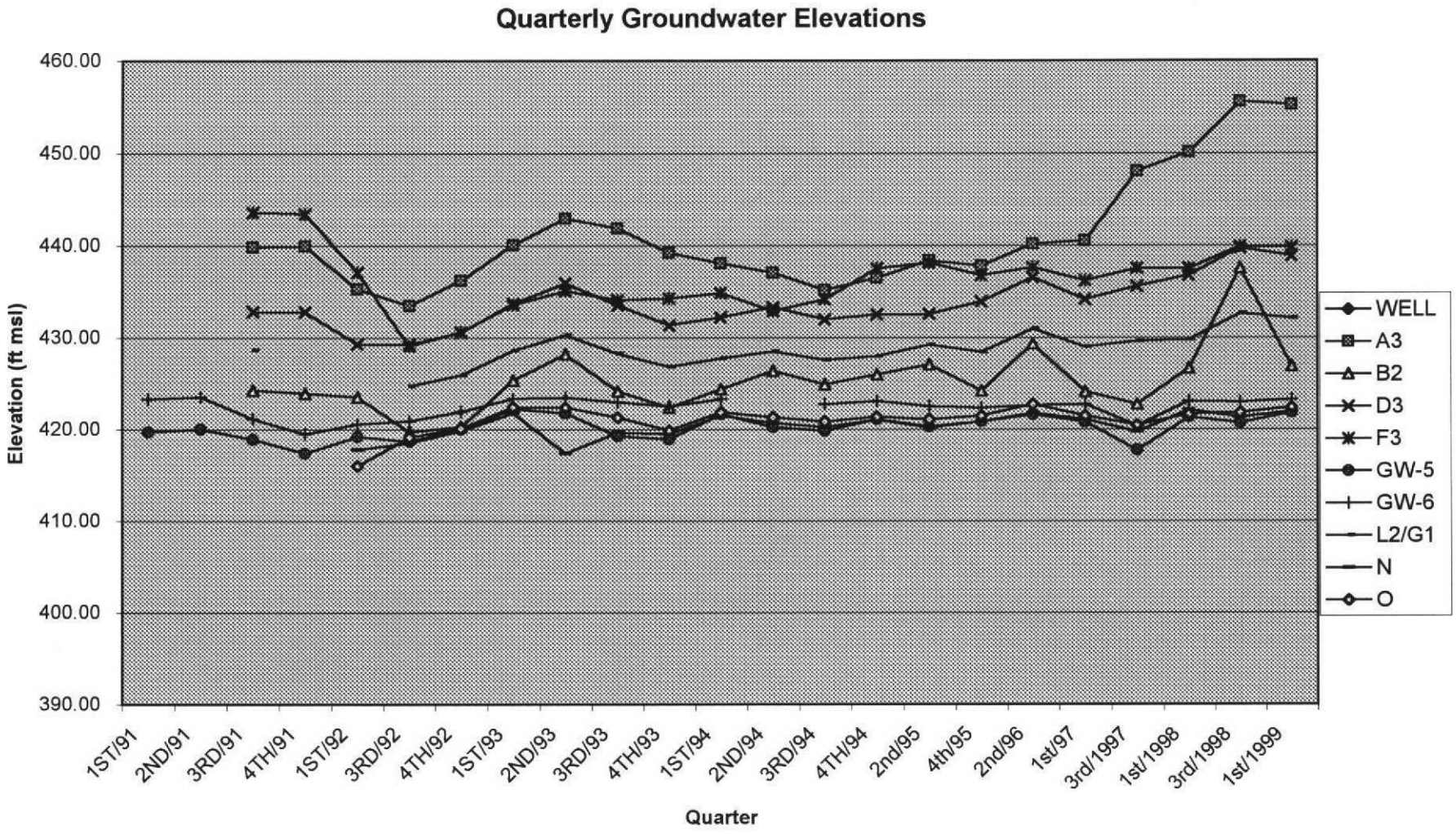


Figure 1
Hydrograph of Ground-Water Levels

Barite Hill Mine
Nevada Goldfields, Inc.
McCormick, South Carolina
Gault Geological Services

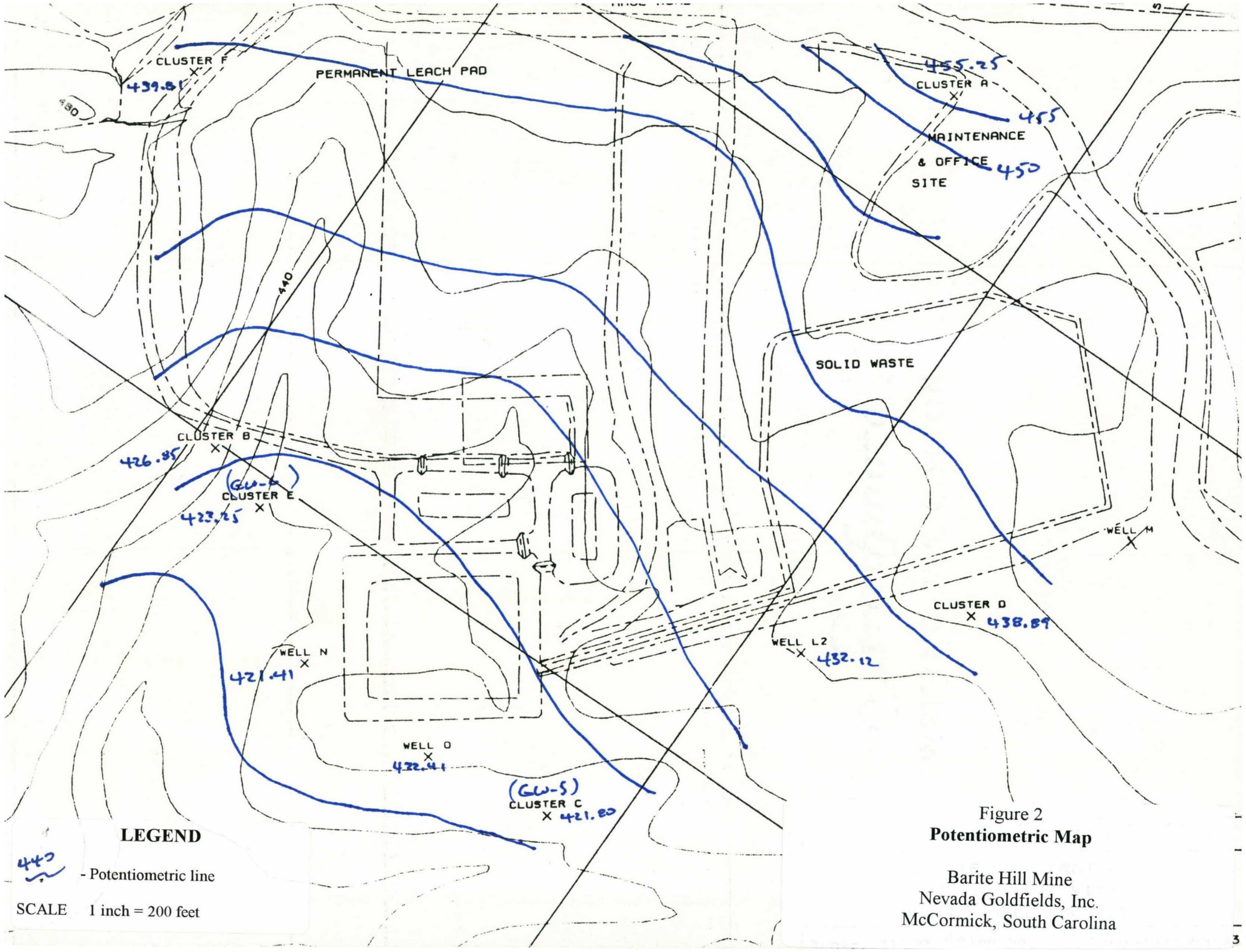


Figure 2
Potentiometric Map

Barite Hill Mine
Nevada Goldfields, Inc.
McCormick, South Carolina

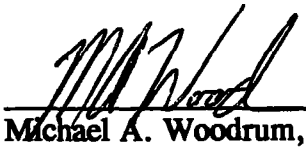
GW Wells Monitoring Report
Semi-Annual Wells
February, 1999

NEVADA GOLDFIELDS
McCormick, SC

SIGNATURE PAGE

This report, "Groundwater Sampling and Analytical Procedures Report for Semi-Annual Wells February, 1999," has been prepared in accordance with accepted quality control practices at the request of and for the exclusive use of **NEVADA GOLDFIELDS** The report has been reviewed by the undersigned reviewers.

SHEALY ENVIRONMENTAL SERVICES, INC.



Michael A. Woodrum, Vice President of Analytical Services
March 3, 1999

Andy Norris, Quality Assurance/Quality Control Officer
March 3, 1999

TABLE OF CONTENTS

GROUNDWATER SAMPLING AND ANALYTICAL PROCEDURES REPORT

Semi- Annual Wells
February, 1999

NEVADA GOLDFIELDS, INC.
McCormick, SC

I. INTRODUCTION

This report describes the procedures followed by **SHEALY ENVIRONMENTAL SERVICES, INC. (SHEALY)** during the sampling and analysis of groundwater at **NEVADA GOLDFIELDS,** McCormick, SC. The report includes procedures for:

1. Sample collection
2. Sample preservation
3. Chain-of-Custody control
4. Analytical protocol

These procedures were developed by **SHEALY** to comply with the sampling procedures recommended by SCDHEC, the US Environmental Protection Agency (EPA), the Resource Conservation and Recovery Act (RCRA), Groundwater Monitoring Technical Enforcement Guidance Document (TEGD) (1986), and published research findings. The protocol described was designed to insure that the integrity of the samples were maintained in the field, during transit to the laboratory and throughout the analytical procedures.

I.A. MONITORING PARAMETERS AND FREQUENCY

The following wells were sampled during February, 1999:

D-3	GW-N	GW-O	GW-5	L-2	F-3
A-3	GW-6	B-2			

These monitoring wells were analyzed for the following parameters:

*Alkalinity	*Ammonia-N	*Chloride	*Cyanide
*Fluoride	*Nitrate-N	*Nitrite-N	*TOC
*TDS			

*Metals: Aluminum, Arsenic, Barium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Zinc, Dissolved Copper

I.B. SAMPLING PROTOCOL

The procedures described below are intended to insure that representative groundwater samples are collected. Procedures for measurement of the water table depth, measurement of total well depth, well evacuation, and sample collection are included.

For each well, all data collected were recorded on a Field Data Information Sheet. Prior to the initiation of activities at each well, all sampling personnel put on new, laboratory quality PVC gloves. These gloves were replaced as necessary during the well evacuation and sampling procedure. Prior to the collection of any groundwater quality data at each well, the surface integrity of the well was checked. Any problems which could affect groundwater sample integrity were noted on the Field Data Information Sheet.

I.B.1. Water Level Measurement

Prior to the evacuation of each monitoring well, the depth to the water table was determined with the use of an electronic water level indicator. The water level indicator uses a sensitive circuitry to activate a buzzer when electrical continuity is made at the probe. The sensitivity is set so that waters with conductivities greater than approximately one umhos/cm will close the circuit. After use at each well, the instrument was cleaned according to the "Field Cleaning Procedures," which are described in Section I.C.1. The depth to the water table was measured by turning the instrument on and then slowly lowering the instrument probe into the well until the buzzer sounded. The distance from the measuring point of the well to the water level was then measured and recorded. The instrument was calibrated in 0.05 foot increments. All measurements were made and estimated to the nearest 0.01 foot.

I.B.2. Total Depth Measurement

The total depth measurement is used in calculating the volume of water standing in the well casing. The total well depth was taken from historical data.

I.B.3. Well Evacuation

The purpose of the well evacuation procedure is to initiate the introduction of water from the surrounding aquifer into which the well is placed. By removing standing water from the well, a hydraulic gradient is created which results in water from the surrounding aquifer into the well. The quality of this water is representative of the water quality immediately surrounding the well.

Well evacuation and sampling of all wells at the site were done using 1.66 inch outside diameter, three foot long Teflon or stainless steel bailers with a single bottom check valve. All bailers were cleaned at the laboratory prior to use, and a separate bailer was used for each well. When field cleaning was required, the method outlined in Section I.C.1. was used and new 1/8 inch nylon twine was used for each well.

The following steps were followed for evacuation with Teflon bailers:

1. The depth to the water table was subtracted from the total well depth to determine the length of the water column. The water column length was multiplied by the appropriate conversion factor for that particular well casing diameter to determine the volume, in gallons, of water standing in the well casing. This volume was then multiplied by three to calculate the standard evacuation volume.
2. The bailer was lowered to a depth just below the water level in the well each time to insure adequate evacuation of the standing water.
3. The pH and Specific Conductivity were measured and recorded periodically during well evacuation. For high yield wells, well evacuation continued until the standard evacuation volume was removed and both pH and Specific Conductivity were relatively stable. Stability of the pH is defined as two consecutive measurements varying by no more than 10 percent. All evacuated volumes and field measurements were recorded on the Field Data Information Sheet.

Wells which were evacuated to dryness prior to reaching the standard evacuation volume were sampled as soon as a sufficient volume of water had entered the well. Field parameters were measured prior to sample collection to insure water quality stability.

I.B.4. <u>Sample Collection</u>

The primary consideration during the collection of groundwater samples is to insure that the sample is not altered or contaminated during withdrawal from the well and introduction into the sample container.

A complete set of pre-cleaned and pre-labeled sample containers were removed from the cooler and slowly filled with fresh sample, poured directly from the bailer. Preservatives were added to the sample bottles prior to leaving for the sampling event. Care was taken to insure that the bailer did not contact the sample bottle during filling. The filled bottles were then capped and securely placed into the pre-cleaned cooler. The Chain of Custody Form, was then completed for that well. Finally, the well was re-capped and locked.

I.C. FIELD QUALITY CONTROL

A strict quality control program is followed in the field by **SHEALY** to insure that sample integrity is maintained during sample collection and transit to the laboratory. In addition, all equipment and instruments are carefully maintained and calibrated in accordance with schedules and procedures described in SHEALY's Quality Control Manual entitled "SOP and QA Manual for Groundwater Sampling".

I.C.1. Field Cleaning Procedures

All field equipment and instrumentation are cleaned at the laboratory according to standard laboratory procedures upon return from each sampling trip. Field equipment and instrumentation include: sample coolers, pH and Specific Conductivity meters, and field measurement vessels. If instrumentation and field equipment were used on more than one well, it was cleaned according to the following field cleaning procedures:

1. Rinse item thoroughly with a 5% phosphate-free laboratory detergent solution.
2. Rinse item with deionized water, twice.

I.C.2. Field Instruments and Measuring Devices

Instruments and devices used to collect field data at the **NEVADA GOLDFIELDS** facility include: pH and Specific Conductivity meters and an electronic water level indicator.

The pH and Specific Conductivity meters were calibrated in the field prior to sampling. The pH meter was calibrated using a 4 SU standard and a 10 SU standard. The Specific Conductivity meter was also calibrated in the field according to SHEALY's Field Operation SOP and the manufacturer's specifications. All calibration records for both meters are recorded in the appropriate calibration log books maintained at Shealy.

I.C.3. Field Blanks

One set of field blanks was collected during the sampling event. At that time, one set of bottles was randomly removed from the sample cooler and labeled as "Field Blank". The Field Blank was obtained by filling a laboratory cleaned bailer with deionized water. this water was then poured into the labeled sample bottles. The deionized water is also used to rinse field equipment. Once filled, the field blanks were treated as samples and placed in the sample cooler for transport to the laboratory. Field blanks and groundwater samples were analyzed for the same parameters in order to assure quality control during sampling, transportation, and analysis.

I.C.4. Field Data Information Sheet

All pertinent field information was recorded on the Field Data Information Sheet as it was collected. This information includes: date of sampling, name of collector, monitoring well number, casing diameter and material of construction, well integrity, measuring point elevation, total well depth, depth to groundwater, volume of water in casing, method of evacuation and sampling, total volume of water evacuated, field measurements with time and volume evacuated, and field observations. Information on the Field Data Information Sheets was reviewed upon arrival at the laboratory and pertinent information transferred to the Certificate of analysis and noted as field measurements.

I.C.5. Sample Transportation and Chain of Custody

The transportation of groundwater samples from the time of collection to their arrival at the laboratory is an important part of the groundwater monitoring program. The mode of travel must be such that the sample is not altered physically, chemically, or biologically. The travel time to the laboratory must not interfere with the sample holding time. The Chain of Custody must also be maintained during the transportation process. Samples collected at the **NEVADA GOLDFIELDS** facility remained in the possession of **SHEALY** personnel and were transported to the laboratory within the allowed holding time of all the required parameters. Custody is defined as:

1. Being in one's physical possession.
2. Being in one's view, after being in one's possession.
3. Being in a designated secure area.

Upon arrival at the laboratory, the sampling personnel relinquished the samples to the laboratory sample custodian. This transaction was documented on the Chain of Custody Form.

Reviewed By: _____ for MPQ _____ 3/3/99

Milton P. Quattlebaum
Field Service Supervisor

Date

II. ANALYTICAL PROTOCOL

The analytical protocols used at SHEALY to insure that groundwater quality at the **NEVADA GOLDFIELDS** facility was accurately detected and quantified were taken two EPA sources, Methods for Chemical Analyses of Water and Wastes and Test Methods for Evaluation Solid Waste. The analysis for metals was for the total recoverable fraction. Laboratory Quality Control/Quality Assurance procedures are presented in detail in the SHEALY's SOP Manuals.

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

106 VANTAGE POINT DRIVE
CAYCE, SOUTH CAROLINA 29033

(803) 791-9700
FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157914
Description: D-3

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer MA

V.P. Analytical MA

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		81.00	ft.		02/04/99	GWS
Water Level Depth From Top of Casing		31.50	ft.		02/04/99	GWS
pH-Field at 19.0 C	150.1	6.43	SU		02/04/99	GWS
Specific Conductance at 25 C - Field	120.1	508	umhos/cm		02/04/99	GWS
Temperature-Field	170.1	19.0	C		02/04/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	113	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	78.5	mg/l		02/11/99 1400	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	0.122	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	5.5	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	296	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	0.281	mg/l	02/09/99 0830	02/12/99 1842	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1842	FTS
Barium	6010B	0.005	mg/l	02/09/99 0830	02/12/99 1842	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1842	FTS
Calcium	6010B	49.6	mg/l	02/09/99 0830	02/12/99 1842	FTS
Chromium	6010B	0.009	mg/l	02/09/99 0830	02/12/99 1842	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1842	FTS
Iron	6010B	0.378	mg/l	02/09/99 0830	02/12/99 1842	FTS
Lead	6010B	<0.003	mg/l	02/09/99 0830	02/12/99 1842	FTS
Magnesium	6010B	18.0	mg/l	02/09/99 0830	02/12/99 1842	FTS
Manganese	6010B	0.057	mg/l	02/09/99 0830	02/12/99 1842	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	0.018	mg/l	02/09/99 0830	02/12/99 1842	FTS
Potassium	6010B	1.28	mg/l	02/09/99 0830	02/17/99 1535	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1842	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1842	FTS
Sodium	6010B	21.6	mg/l	02/09/99 0830	02/12/99 1842	FTS
Zinc	6010B	0.025	mg/l	02/09/99 0830	02/12/99 1842	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1837	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

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FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157917
Description: GW-N

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer _____

V.P. Analytical _____

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		27.02	ft.		02/04/99	GWS
Water Level Depth From Top of Casing		12.0	ft.		02/04/99	GWS
pH-Field at 17.0 C	150.1	6.86	SU		02/04/99	GWS
Specific Conductance at 25 C - Field	120.1	472	umhos/cm		02/04/99	GWS
Temperature-Field	170.1	17.0	C		02/04/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	168	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	53.5	mg/l		02/11/99 1400	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	0.100	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	23.4	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	52	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	0.487	mg/l	02/09/99 0830	02/12/99 1928	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1928	FTS
Barium	6010B	0.006	mg/l	02/09/99 0830	02/12/99 1928	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1928	FTS
Calcium	6010B	32.3	mg/l	02/09/99 0830	02/12/99 1928	FTS
Chromium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1928	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1928	FTS
Iron	6010B	0.267	mg/l	02/09/99 0830	02/12/99 1928	FTS
Lead	6010B	<0.003	mg/l	02/09/99 0830	02/12/99 1928	FTS
Magnesium	6010B	26.4	mg/l	02/09/99 0830	02/12/99 1928	FTS
Manganese	6010B	0.026	mg/l	02/09/99 0830	02/12/99 1928	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	<0.010	mg/l	02/09/99 0830	02/12/99 1928	FTS
Potassium	6010B	0.714	mg/l	02/09/99 0830	02/17/99 1543	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1928	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1928	FTS
Sodium	6010B	43.0	mg/l	02/09/99 0830	02/12/99 1928	FTS
Zinc	6010B	0.014	mg/l	02/09/99 0830	02/12/99 1928	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1923	FTS

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CERTIFICATE OF ANALYSIS

SC DHEC No. 32010 NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157519
Description: GW 0

Coll. Date: 02/02/99
Coll. Time: 1420

Date Received: 02/02/99
Date Reported: 02/18/99
Date Revised: 03/26/99

QA/QC Officer _____

V.P. Analytical _____

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		28.62	ft.		02/02/99	GWS
Water Level Depth From Top of Casing		20.05	ft.		02/02/99	GWS
pH-Field at 17.0 C	150.1	6.70	SU		02/02/99	GWS
Specific Conductance at 25 C - Field	120.1	390	umhos/cm		02/02/99	GWS
Temperature-Field	170.1	17.0	C		02/02/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	128	mg/l		02/03/99 1344	NWD
Ammonia-N	350.3	0.313	mg/l		02/04/99 0830	MCM
Chloride	300.0	69.8	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/15/99 0800	02/15/99 1000	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/04/99 1300	JPS
Nitrate-N	353.2	0.120	mg/l		02/02/99 0940	NWD
Nitrite-N	354.1	0.023	mg/l		02/02/99 0940	NWD
Sulfate	300.0	32.3	mg/l		02/04/99 1300	JPS
TOC	415.1	<1.0	mg/l		02/16/99 0800	JPS
TDS	160.1	334	mg/l		02/03/99 1530	MCM
METALS						
Aluminum	6010B	0.352	mg/l	02/04/99 0830	02/10/99 1514	FTS
Arsenic	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1514	FTS
Barium	6010B	0.018	mg/l	02/04/99 0830	02/10/99 1514	FTS
Cadmium	6010B	<0.002	mg/l	02/04/99 0830	02/10/99 1514	FTS
Calcium	6010B	42.5	mg/l	02/04/99 0830	02/10/99 1514	FTS
Chromium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1514	FTS
Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1514	FTS
Iron	6010B	0.078	mg/l	02/04/99 0830	02/10/99 1514	FTS
Lead	6010B	<0.003	mg/l	02/04/99 0830	02/10/99 1514	FTS
Magnesium	6010B	22.8	mg/l	02/04/99 0830	02/10/99 1514	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Manganese	200.7	<0.010	mg/l	02/04/99 0830	02/10/99 1514	FTS
Mercury	7470A	<0.0002	mg/l	02/17/99 0830	02/17/99 1500	FTC
Nickel	6010B	<0.010	mg/l	02/04/99 0830	02/10/99 1514	FTS
Potassium	6010B	1.40	mg/l	02/04/99 0830	02/10/99 1514	FTS
Selenium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1514	FTS
Silver	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1514	FTS
Sodium	6010B	27.3	mg/l	02/04/99 0830	02/10/99 1514	FTS
Zinc	6010B	0.011	mg/l	02/04/99 0830	02/10/99 1514	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1308	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

106 VANTAGE POINT DRIVE
CAYCE, SOUTH CAROLINA 29033

(803) 791-9700
FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010 NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157518
Description: GW 5

Coll. Date: 02/02/99
Coll. Time: 1330

Date Received: 02/02/99
Date Reported: 02/18/99
Date Revised: 03/26/99

QA/QC Officer _____

V.P. Analytical _____

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		37.80	ft.		02/02/99	GWS
Water Level Depth From Top of Casing		10.80	ft.		02/02/99	GWS
pH-Field at 15.0 C	150.1	7.10	SU		02/02/99	GWS
Specific Conductance at 25 C - Field	120.1	371	umhos/cm		02/02/99	GWS
Temperature-Field	170.1	15.0	C		02/02/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	177	mg/l		02/03/99 1344	NWD
Ammonia-N	350.3	0.452	mg/l		02/04/99 0830	MCM
Chloride	300.0	45.7	mg/l		02/04/99 1300	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/15/99 0800	02/15/99 1000	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/04/99 1300	JPS
Nitrate-N	353.2	0.035	mg/l		02/02/99 0940	NWD
Nitrite-N	354.1	0.028	mg/l		02/02/99 0940	NWD
Sulfate	300.0	9.54	mg/l		02/04/99 1300	JPS
TOC	415.1	<1.0	mg/l		02/16/99 0800	JPS
TDS	160.1	268	mg/l		02/03/99 1530	MCM
METALS						
Aluminum	6010B	8.68	mg/l	02/04/99 0830	02/10/99 1303	FTS
Arsenic	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1303	FTS
Barium	6010B	0.538	mg/l	02/04/99 0830	02/10/99 1303	FTS
Cadmium	6010B	<0.002	mg/l	02/04/99 0830	02/10/99 1303	FTS
Calcium	6010B	61.5	mg/l	02/04/99 0830	02/10/99 1303	FTS
Chromium	6010B	0.009	mg/l	02/04/99 0830	02/10/99 1303	FTS
Copper	6010B	0.038	mg/l	02/04/99 0830	02/10/99 1303	FTS
Iron	6010B	9.83	mg/l	02/04/99 0830	02/10/99 1303	FTS
Lead	6010B	0.006	mg/l	02/04/99 0830	02/10/99 1303	FTS
Magnesium	6010B	35.5	mg/l	02/04/99 0830	02/10/99 1303	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Manganese	200.7	2.78	mg/l	02/04/99 0830	02/10/99 1303	FTS
Mercury	7470A	<0.0002	mg/l	02/17/99 0830	02/17/99 1500	FTC
Nickel	6010B	0.028	mg/l	02/04/99 0830	02/10/99 1303	FTS
Potassium	6010B	0.833	mg/l	02/04/99 0830	02/10/99 1303	FTS
Selenium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1303	FTS
Silver	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1303	FTS
Sodium	6010B	29.4	mg/l	02/04/99 0830	02/10/99 1303	FTS
Zinc	6010B	0.100	mg/l	02/04/99 0830	02/10/99 1303	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1258	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

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FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157517
Description: L-2

Coll. Date: 02/02/99
Coll. Time: 1255

Date Received: 02/02/99
Date Reported: 02/18/99
Date Revised: 03/26/99

QA/QC Officer

V.P. Analytical

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		81.91	ft.		02/02/99	GWS
Water Level Depth From Top of Casing		30.10	ft.		02/02/99	GWS
pH-Field at 17.0 C	150.1	6.96	SU		02/02/99	GWS
Specific Conductance at 25 C - Field	120.1	319	umhos/cm		02/02/99	GWS
Temperature-Field	170.1	17.0	C		02/02/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	132	mg/l		02/03/99 1344	NWD
Ammonia-N	350.3	0.321	mg/l		02/04/99 0830	MCM
Chloride	300.0	42.3	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/15/99 0800	02/15/99 1000	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/04/99 1300	JPS
Nitrate-N	353.2	0.127	mg/l		02/02/99 0940	NWD
Nitrite-N	354.1	<0.020	mg/l		02/02/99 0940	NWD
Sulfate	300.0	4.97	mg/l		02/04/99 1300	JPS
TOC	415.1	<1.0	mg/l		02/16/99 0800	JPS
TDS	160.1	340	mg/l		02/03/99 1530	MCM
METALS						
Aluminum	6010B	0.110	mg/l	02/04/99 0830	02/10/99 1253	FTS
Arsenic	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Barium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Cadmium	6010B	<0.002	mg/l	02/04/99 0830	02/10/99 1253	FTS
Calcium	6010B	47.0	mg/l	02/04/99 0830	02/10/99 1253	FTS
Chromium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Iron	6010B	<0.050	mg/l	02/04/99 0830	02/10/99 1253	FTS
Lead	6010B	<0.003	mg/l	02/04/99 0830	02/10/99 1253	FTS
Magnesium	6010B	16.8	mg/l	02/04/99 0830	02/10/99 1253	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Manganese	200.7	<0.010	mg/l	02/04/99 0830	02/10/99 1253	FTS
Mercury	7470A	<0.0002	mg/l	02/17/99 0830	02/17/99 1500	FTC
Nickel	6010B	<0.010	mg/l	02/04/99 0830	02/10/99 1253	FTS
Potassium	6010B	0.343	mg/l	02/04/99 0830	02/10/99 1253	FTS
Selenium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Silver	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Sodium	6010B	18.6	mg/l	02/04/99 0830	02/10/99 1253	FTS
Zinc	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1253	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1248	FTS

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www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157918
Description: F-3

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer _____

V.P. Analytical _____

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		71.35	ft.		02/04/99	GWS
Water Level Depth From Top of Casing		42.45	ft.		02/04/99	GWS
pH-Field at 18.0 C	150.1	5.63	SU		02/04/99	GWS
Specific Conductance at 25 C - Field	120.1	58	umhos/cm		02/04/99	GWS
Temperature-Field	170.1	18.0	C		02/04/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	<10.0	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	3.87	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	0.066	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	5.94	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	32	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	0.167	mg/l	02/09/99 0830	02/12/99 1938	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1938	FTS
Barium	6010B	0.114	mg/l	02/09/99 0830	02/12/99 1938	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1938	FTS
Calcium	6010B	2.19	mg/l	02/09/99 0830	02/12/99 1938	FTS
Chromium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1938	FTS
Copper	6010B	0.012	mg/l	02/09/99 0830	02/12/99 1938	FTS
Iron	6010B	0.133	mg/l	02/09/99 0830	02/12/99 1938	FTS
Lead	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1938	FTS
Magnesium	6010B	1.16	mg/l	02/09/99 0830	02/12/99 1938	FTS
Manganese	6010B	0.018	mg/l	02/09/99 0830	02/12/99 1938	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Mercury	7470A	0.001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	<0.010	mg/l	02/09/99 0830	02/12/99 1938	FTS
Potassium	6010B	0.424	mg/l	02/09/99 0830	02/17/99 1546	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1938	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1938	FTS
Sodium	6010B	2.83	mg/l	02/09/99 0830	02/12/99 1938	FTS
Zinc	6010B	0.039	mg/l	02/09/99 0830	02/12/99 1938	FTS
Dissolved Copper	6010B	0.007	mg/l	02/09/99 0830	02/12/99 1933	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

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CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157516
Description: A-3

Coll. Date: 02/02/99
Coll. Time: 1145

Date Received: 02/02/99
Date Reported: 02/18/99
Date Revised: 03/26/99

QA/QC Officer _____

V.P. Analytical _____

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		73.10	ft.		02/02/99	GWS
Water Level Depth From Top of Casing		30.85	ft.		02/02/99	GWS
pH-Field at 15.0 C	150.1	5.04	SU		02/02/99	GWS
Specific Conductance at 25 C - Field	120.1	18.5	umhos/cm		02/02/99	GWS
Temperature-Field	170.1	15.0	C		02/02/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	<10.0	mg/l		02/03/99 1344	NWD
Ammonia-N	350.3	0.337	mg/l		02/04/99 0830	MCM
Chloride	300.0	4.41	mg/l		02/04/99 1300	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/15/99 0800	02/15/99 1000	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/04/99 1300	JPS
Nitrate-N	353.2	0.125	mg/l		02/02/99 0940	NWD
Nitrite-N	354.1	<0.020	mg/l		02/02/99 0940	NWD
Sulfate	300.0	8.28	mg/l		02/04/99 1300	JPS
TOC	415.1	<1.0	mg/l		02/16/99 0800	JPS
TDS	160.1	<10	mg/l		02/03/99 1530	MCM
METALS						
Aluminum	6010B	0.165	mg/l	02/04/99 0830	02/10/99 1202	FTS
Arsenic	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1202	FTS
Barium	6010B	0.162	mg/l	02/04/99 0830	02/10/99 1202	FTS
Cadmium	6010B	<0.002	mg/l	02/04/99 0830	02/10/99 1202	FTS
Calcium	6010B	0.201	mg/l	02/04/99 0830	02/10/99 1202	FTS
Chromium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1202	FTS
Copper	6010B	0.012	mg/l	02/04/99 0830	02/10/99 1202	FTS
Iron	6010B	<0.050	mg/l	02/04/99 0830	02/10/99 1202	FTS
Lead	6010B	<0.003	mg/l	02/04/99 0830	02/10/99 1202	FTS
Magnesium	6010B	0.208	mg/l	02/04/99 0830	02/10/99 1202	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Manganese	200.7	<0.010	mg/l	02/04/99 0830	02/10/99 1202	FTS
Mercury	7470A	<0.0002	mg/l	02/17/99 0830	02/17/99 1500	FTC
Nickel	6010B	<0.010	mg/l	02/04/99 0830	02/10/99 1202	FTS
Potassium	6010B	<0.200	mg/l	02/04/99 0830	02/10/99 1202	FTS
Selenium	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1202	FTS
Silver	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1202	FTS
Sodium	6010B	<0.100	mg/l	02/04/99 0830	02/10/99 1202	FTS
Zinc	6010B	0.018	mg/l	02/04/99 0830	02/10/99 1202	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/04/99 0830	02/10/99 1157	FTS

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Scientists and Consultants

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CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157916
Description: GW-6

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer _____

V.P. Analytical _____

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		28.40	ft.		02/04/99	GWS
Water Level Depth From Top of Casing		2.65	ft.		02/04/99	GWS
pH-Field at 19.0 C	150.1	6.47	SU		02/04/99	GWS
Specific Conductance at 25 C - Field	120.1	226	umhos/cm		02/04/99	GWS
Temperature-Field	170.1	19.0	C		02/04/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	68.8	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	28.5	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	0.011	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	<0.020	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	8.82	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	84	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	0.438	mg/l	02/09/99 0830	02/12/99 1918	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Barium	6010B	0.015	mg/l	02/09/99 0830	02/12/99 1918	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1918	FTS
Calcium	6010B	14.8	mg/l	02/09/99 0830	02/12/99 1918	FTS
Chromium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Iron	6010B	0.462	mg/l	02/09/99 0830	02/12/99 1918	FTS
Lead	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Magnesium	6010B	7.48	mg/l	02/09/99 0830	02/12/99 1918	FTS
Manganese	6010B	0.052	mg/l	02/09/99 0830	02/12/99 1918	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	<0.010	mg/l	02/09/99 0830	02/12/99 1918	FTS
Potassium	6010B	0.435	mg/l	02/09/99 0830	02/17/99 1540	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1918	FTS
Sodium	6010B	20.3	mg/l	02/09/99 0830	02/12/99 1918	FTS
Zinc	6010B	0.014	mg/l	02/09/99 0830	02/12/99 1918	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1913	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

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CAYCE, SOUTH CAROLINA 29033

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CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157915
Description: B-2

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer _____

V.P. Analytical _____

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Well Depth		121.00	ft.		02/04/99	GWS
Water Level Depth From Top of Casing		19.65	ft.		02/04/99	GWS
pH-Field at 18.0 C	150.1	6.84	SU		02/04/99	GWS
Specific Conductance at 25 C - Field	120.1	231	umhos/cm		02/04/99	GWS
Temperature-Field	170.1	18.0	C		02/04/99	GWS
INORGANICS						
Alkalinity Bicarbonate	SM4500D	112	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	9.09	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	0.011	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	0.027	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	10.1	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	172	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	0.193	mg/l	02/09/99 0830	02/12/99 1908	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1908	FTS
Barium	6010B	0.189	mg/l	02/09/99 0830	02/12/99 1908	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1908	FTS
Calcium	6010B	38.5	mg/l	02/09/99 0830	02/12/99 1908	FTS
Chromium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1908	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1908	FTS
Iron	6010B	1.05	mg/l	02/09/99 0830	02/12/99 1908	FTS
Lead	6010B	<0.003	mg/l	02/09/99 0830	02/12/99 1908	FTS
Magnesium	6010B	5.68	mg/l	02/09/99 0830	02/12/99 1908	FTS
Manganese	6010B	0.395	mg/l	02/09/99 0830	02/12/99 1908	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	<0.010	mg/l	02/09/99 0830	02/12/99 1908	FTS
Potassium	6010B	1.88	mg/l	02/09/99 0830	02/17/99 1540	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1908	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1908	FTS
Sodium	6010B	11.6	mg/l	02/09/99 0830	02/12/99 1908	FTS
Zinc	6010B	0.035	mg/l	02/09/99 0830	02/12/99 1908	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1847	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

106 VANTAGE POINT DRIVE
CAYCE, SOUTH CAROLINA 29033

(803) 791-9700
FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157919
Description: D3A

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 02/18/99

QA/QC Officer _____

V.P. Analytical _____

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
METALS						
Aluminum	6010B	0.230	mg/l	02/09/99 0830	02/12/99 1949	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1949	FTS
Barium	6010B	0.007	mg/l	02/09/99 0830	02/12/99 1949	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 1949	FTS
Calcium	6010B	54.9	mg/l	02/09/99 0830	02/12/99 1949	FTS
Chromium	6010B	0.009	mg/l	02/09/99 0830	02/12/99 1949	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1949	FTS
Iron	6010B	0.259	mg/l	02/09/99 0830	02/12/99 1949	FTS
Lead	6010B	<0.003	mg/l	02/09/99 0830	02/12/99 1949	FTS
Magnesium	6010B	19.9	mg/l	02/09/99 0830	02/12/99 1949	FTS
Manganese	6010B	0.054	mg/l	02/09/99 0830	02/12/99 1949	FTS
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	0.024	mg/l	02/09/99 0830	02/12/99 1949	FTS
Potassium	6010B	1.71	mg/l	02/09/99 0830	02/17/99 1549	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1949	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1949	FTS
Sodium	6010B	24.5	mg/l	02/09/99 0830	02/12/99 1949	FTS
Zinc	6010B	0.047	mg/l	02/09/99 0830	02/12/99 1949	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1943	FTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Scientists and Consultants

106 VANTAGE POINT DRIVE
CAYCE, SOUTH CAROLINA 29033

(803) 791-9700
FAX (803) 791-9111
www.shealyenvironmental.com

CERTIFICATE OF ANALYSIS

SC DHEC No. 32010

NC DEHNR No. 329

Client: NEVADA GOLDFIELDS
PO Box 1530
McCormick, SC 29835

Attention: Scott Wilkinson

SHEALY Lab No: 157920FB
Description: F. Blank

Coll. Date: 02/04/99
Coll. Time:

Date Received: 02/05/99
Date Reported: 03/02/99

QA/QC Officer

V.P. Analytical

*** SCDHEC Cert. #40111

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
INORGANICS						
Alkalinity Bicarbonate	SM4500D	<10.0	mg/l		02/13/99 0934	NWD
Ammonia-N	350.3	<0.100	mg/l		02/09/99 0900	EDN
Chloride	300.0	<1.00	mg/l		02/09/99 1200	JPS
Cyanide-Total	335.2	<0.010	mg/l	02/17/99 0830	02/18/99 1200	JPS
Fluoride-Total	300.0	<0.500	mg/l		02/09/99 1200	JPS
Nitrate-N	353.2	<0.020	mg/l		02/05/99 0938	NWD
Nitrite-N	354.1	<0.020	mg/l		02/05/99 0938	NWD
Sulfate	375.4	<1.00	mg/l		02/09/99 1200	JPS
TOC	415.1	<1.00	mg/l		02/26/99	***
TDS	160.1	<10	mg/l		02/08/99 1425	MCM
METALS						
Aluminum	6010B	<0.050	mg/l	02/09/99 0830	02/12/99 2014	FTS
Arsenic	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Barium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Cadmium	6010B	<0.002	mg/l	02/09/99 0830	02/12/99 2014	FTS
Calcium	6010B	<0.050	mg/l	02/09/99 0830	02/12/99 2014	FTS
Chromium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Iron	6010B	<0.050	mg/l	02/09/99 0830	02/12/99 2014	FTS
Lead	6010B	<0.003	mg/l	02/09/99 0830	02/12/99 2014	FTS
Magnesium	6010B	<0.030	mg/l	02/09/99 0830	02/12/99 2014	FTS
Manganese	6010B	<0.015	mg/l	02/09/99 0830	02/12/99 2014	FTS
Mercury	7470A	<0.0001	mg/l	02/11/99 0830	02/12/99 0900	FTC
Nickel	6010B	<0.010	mg/l	02/09/99 0830	02/12/99 2014	FTS

Parameters	Method	Result	Units	Date Prepared	Date Analyzed	Anal.
Potassium	6010B	<0.200	mg/l	02/09/99 0830	02/17/99 1551	FTS
Selenium	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Silver	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Sodium	6010B	<0.100	mg/l	02/09/99 0830	02/12/99 2014	FTS
Zinc	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 2014	FTS
Dissolved Copper	6010B	<0.005	mg/l	02/09/99 0830	02/12/99 1954	FTS

DEPTH TO GROUNDWATER SUMMARY

NEVADA GOLDFIELDS
McCormick, SC

WELL NUMBER	DGW (feet)
D-3	31.5
GW-N	12.0
GW-O	20.1
GW-5	10.8
L-2	30.1
F-3	42.5
A-3	30.9
GW-6	2.65
B-2	19.7

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SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Pointe Drive
Cayce, South Carolina 29033
Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Page ____ of ____

CHAIN OF CUSTODY RECORD

SAMPLE ANALYSIS REQUIRED

CHAIN OF CUSTODY #

Client Name Nevada Gold Fields

Reporting Address McCormick Sc

Attention S. Wilkerson

Telephone No. _____ P.O. No. _____

NPDES # _____

County _____

Receiving Stream _____

Outfall No. _____

←PRESERVATION (CODE)
CODE: A = None, B = HNO3, C = H2SO4, D = NaOH, E = ICE, F = _____

LAB USE ONLY
Program Area (Circle): DW, CWA/NPDES, RCRA, SP/SOL, SP/LIQ, Other:_____

Sample ID (Location)	Yr/99 DATE	TIME	WELL	SOLID	COMP	GRAB	# of containers	pH, Conductivity	BOD	Nutrients - Specify	METALS - Specify	TOC/TOX - Specify	BTEX	VOC - Specify Method required	Pesticides/PCBs - Specify	Herbicides	Total Phenol	Oil & Grease	BNAs	Solids - Specify	Cyanide	Coliform - Specify type	Toxicity - Specify	General	DISSOLVED METALS	REMARKS	SESI LAB I.D.
										C	B										D			A	A		
A-3	Start 2 Feb / Finish	1145	X				5			✓	✓										✓			✓	✓	Gen - TDS, Alk, Sulfate, Nitrate-N, Chloride	157516
L-2 ~~SMPL~~	Start 2Feb / Finish	1255	X				5			✓	✓										✓			✓	✓	Nuts - Nitrite-N, TOC, Ammonia	157517
GW5	Start 2Feb / Finish	1330					5																			Metals - As, Hg, Se, Pb, Al, Ba, Cd, Cu, Cr, Co	157518
GW O	Start 2Feb / Finish	1420					5																			Fe, Mg, Ni, K, Ag, Na, Zn,	157519
	Start / Finish																									Dissolved Metal Cu	
	Start / Finish																									Dissolved Metals - must be Filtered.	
	Start / Finish																										
	Start / Finish																										

SAMPLER	Date/Time	Received by (Sig.)	Date/Time	Hazards Associated with Sample	Custody Seal Intact (Circle)
Print Name: MILTON QUATTLEBAUM					YES NO NONE
Signature:	2Feb99 1655				Receipt TRC _____ mg/l
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time		Receipt pH _____ su
Relinquished by (Sig.)	Date/Time	Lab Receipt by (Sig.)	2/2/99 1655		Receipt Temp. 3.8 °C
					Received on Ice (Circle) YES NO ICE PACK

AMERICAN SYSTEMS, COLUMBIA, S.C.

White Copy: Sampler — Yellow Copy: Shealy — Pink Copy: Report

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SHEALY ENVIRONMENTAL SERVICES, INC.

106 Vantage [illegible]nte Drive
Cayce, South [illegible]lina 29033
Telephone No. (803) 791-9700 Fax No. (803) 791-9111

Page ____ of ____

CHAIN OF CUSTODY

Client Name Nevada Goldfield

Reporting Address McCarran Jr

Attention S. Wilberson

Telephone No. _____ P.O. No. _____

NPDES # _____

County _____

Receiving Stream _____

Outfall No. _____

CHAIN OF CUSTODY RECORD

SAMPLE ANALYSIS REQUIRED

Sample ID (Location)	Yr. 99 DATE	TIME	WELL	SOLID	COMP	GRAB	# of containers	pH, Conductivity	BOD	Nutrients - Specify	METALS - Specify	TOC/TOX - Specify	BTEX	VOC - Specify Method required	Pesticides/PCBs - Specify	Herbicides	Total Phenol	Oil & Grease	BNAs	Solids - Specify	Cyanide	Coliform - Specify type	Toxicity - Specify	General	Dis. Cu	REMARKS	SESI LAB I.D.
D-3	Start 4Feb / Finish		✓				5			✓	✓	✓									✓			✓	✓	Gen - TDS, Cl, Nitrate-N, Alk, Sulfate	157914
B-2	Start / Finish		✓				5			✓	✓	✓									✓			✓	✓	Nuts - Nitrite-N, Ammonia TOC	157915
GW-6	Start / Finish		✓				5			✓	✓	✓									✓			✓	✓	Metals - As, Hg, Se, Pb, Al, Ba, Cd, Ca	157916
GW-N	Start / Finish		✓				5			✓	✓	✓									✓			✓	✓	Cr, Cu, Fe, Mg, Mn, Ni, K, Ag, Na, Zn	157917
F-3	Start / Finish		✓				5			✓	✓	✓									✓			✓	✓		157918
D3a	Start / Finish		✓				2			X	✓	X									X			X	✓	Dissolved Cu - must be filtered	157919
F Blank	Start / Finish																										157920 FB
	Start / Finish																										

←PRESERVATION (CODE)

CODE: A = None
B = HNO3
C = H2SO4
D = NaOH
E = ICE
F = _____

LAB USE ONLY

Program Area (Circle)
DW CWA/NPDES
RCRA SP/SOL
SP/LIQ Other: _____

SAMPLER	Date/Time	Received by (Sig.)	Date/Time	Hazards Associated with Sample	Custody Seal Intact (Circle)
Print Name: MILTON QUATTLEBAUM					YES NO NONE
Signature:	4Feb99 1830	Secure Area	4Feb99 1830		Receipt TRC _____ mg/l
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time		Receipt pH _____ su
Relinquished by (Sig.) Secure Area	5Feb99 0845	Lab Receipt by (Sig.) WJ Bridges	5/5/99 0845		Receipt Temp. 3.6 °C
					Received on Ice (Circle) YES NO ICE PACK

AMERICAN SYSTEMS, COLUMBIA, S.C.

White Copy: Sampler Yellow Copy: Shealy Pink Copy: Report

157914

Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	February 24 1999	Casing Diameter: 2 inches	Casing Material: (PVC) Metal
Field Personnel	GWS, (MPQ)	Guard Pipe: PVC - (Metal) No	Locking Cap: (Y) - N
Facility Name	NEVADA GOLDFIELDS, INC.	Protective Abutment: Y - (N)	Integrity Satisfactory: (Y) - N
Well ID #	D-3	Well Yield: Low - Mod. - High	
Weather Conditions	OVERCAST Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	81.00		
Depth To Groundwater (DGW) =	31.50		
Length Of Water Column (LWC) =	49.50		
1 Casing Volume (OCV) = LWC x	0.163 = 8.1 gal.		
3 Casing Volumes =	24.3 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW (GP) Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

FIELD ANALYSES

	1st					
VOLUME PURGED (GALLONS)	8.1	16.2	24.3			WELL SAMPLE TIME: 1110
TIME (24 HOUR SYSTEM)	1040	1044	1049	1054		Remarks:
pH (SU)	6.29	6.38	6.41	~~6~~ 6.43		
WATER TEMPERATURE (°C.)	18.0	19	19	19		
SP. CONDUCTIVITY (UMHOS/CM)	480	470	460	450		
TURBIDITY (SUBJECTIVE)*	1	1	1	1		
ODOR (SUBJECTIVE)**	1	1	1	1		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 4 1999**	Casing Diameter: 2 inches	Casing Material: (PVC) Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC - (Metal) - No	Locking Cap: (Y) N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - (N)	Integrity Satisfactory: (Y) N
Well ID #	GW-N	Well Yield: Low - (Mod.) - High	
Weather Conditions	Clear, Windy Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	27.02		
Depth To Groundwater (DGW) =	12.0		
Length Of Water Column (LWC) =	15.02		
1 Casing Volume (OCV) = LWC x	.163 = 2.45 gal.		
3 Casing Volumes =	7.34 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW GP Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	2.45	4.90	7.35	
TIME (24 HOUR SYSTEM)	1136	1140	1146	1150	
pH (SU)	6.47	6.69	6.74	6.86	
WATER TEMPERATURE (°C.)	17	16	17	17	
SP. CONDUCTIVITY (UMHOS/CM)	430	410	400	400	
TURBIDITY (SUBJECTIVE)*	1	1	2	2	
ODOR (SUBJECTIVE)**	1	1	1	1	

WELL SAMPLE TIME: 1156

Remarks: X

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 2 1999**	Casing Diameter: 2 inches	Casing Material: (PVC) Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC - (Metal) - No	Locking Cap: (Y) N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - (N)	Integrity Satisfactory: (Y) N
Well ID #	GW0	Well Yield: Low - Mod. - High	
Weather Conditions	Clear, windy Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	28.62		
Depth To Groundwater (DGW) =	20.05		
Length Of Water Column (LWC) =	8.57		
1 Casing Volume (OCV) = LWC x	0.163 = 1.4 gal.	Dry @ 2.8 gals	
3 Casing Volumes =	4.2 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW GP Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters
1.5" = 0.092
2" = 0.163
3" = 0.367
4" = 0.652
5" = 1.02
6" = 1.47
7" = 2.00
8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	1.4	2.8			WELL SAMPLE TIME: 1420
TIME (24 HOUR SYSTEM)	1400	1402	1404			Remarks:
pH (SU)	6.63	6.70	6.70			
WATER TEMPERATURE (°C.)	17	17	17			
SP. CONDUCTIVITY (UMHOS/CM)	340	335	330			
TURBIDITY (SUBJECTIVE)*	1	1	1			
ODOR (SUBJECTIVE)**	1	1	1			

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 2 1999**	Casing Diameter: 4 inches	Casing Material: (PVC) - Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC - (Metal) - No	Locking Cap: (Y) - N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - (N)	Integrity Satisfactory: (Y) - N
Well ID #	GW-5	Well Yield: Low - Mod. - High	
Weather Conditions	OVERCAST / WINDY Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	37.80		
Depth To Groundwater (DGW) =	10.80		
Length Of Water Column (LWC) =	27.00	Dye 17.6	
1 Casing Volume (OCV) = LWC x	0.652 = 17.6 gal.		
3 Casing Volumes =	52.8 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW GP Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters
1.5" = 0.092 5" = 1.02
2" = 0.163 6" = 1.47
3" = 0.367 7" = 2.00
4" = 0.652 8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	17.6				WELL SAMPLE TIME: 1330
TIME (24 HOUR SYSTEM)	1303	1318				Remarks:
pH (SU)	7.07	7.10				
WATER TEMPERATURE (°C.)	15	15				
SP. CONDUCTIVITY (UMHOS/CM)	300	300				
TURBIDITY (SUBJECTIVE)*	1	4				
ODOR (SUBJECTIVE)**	1	1				

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 2 1999**	Casing Diameter: 2 inches	Casing Material: PVC - Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC - Metal - No	Locking Cap: Y - N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - N	Integrity Satisfactory: Y - N
Well ID #	L-2	Well Yield: Low - Mod. - High	
Weather Conditions	OVERCAST / WINDY Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	81.91		
Depth To Groundwater (DGW) =	30.10		
Length Of Water Column (LWC) =	51.81		
1 Casing Volume (OCV) = LWC x	0.163 = 8.4 gal.		
3 Casing Volumes =	25.2 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other_____		
Method of Sample Collection	TB SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	8.4	16.8	25.2		WELL SAMPLE TIME: 1255
TIME (24 HOUR SYSTEM)	1216	~~1225~~ 1220	1234	1246		Remarks:
pH (SU)	6.70	6.78	6.88	6.96		
WATER TEMPERATURE (°C.)	17.0	17.0	17.0	17.0		
SP. CONDUCTIVITY (UMHOS/CM)	270	270	270	270		
TURBIDITY (SUBJECTIVE)*	1	1	1	1		
ODOR (SUBJECTIVE)**	1	1	1	1		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	February 4 1999	Casing Diameter: 2 inches	Casing Material: (PVC) Metal
Field Personnel	GWS, MPQ	Guard Pipe: PVC (Metal) No	Locking Cap: (Y) N
Facility Name	NEVADA GOLDFIELDS, INC.	Protective Abutment: Y -(N)	Integrity Satisfactory: (Y) N
Well ID #	F-3	Well Yield: Low (Mod.) - High	
Weather Conditions	Clear, Windy Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	71.35		
Depth To Groundwater (DGW) =	42.45		
Length Of Water Column (LWC) =	28.9		
1 Casing Volume (OCV) = LWC x	0.163 = 4.71 gal.		
3 Casing Volumes =	14.13 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW GP Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters
1.5" = 0.092
2" = 0.163
3" = 0.367
4" = 0.652
5" = 1.02
6" = 1.47
7" = 2.00
8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	4.71	9.42	14.13		WELL SAMPLE TIME:
TIME (24 HOUR SYSTEM)	1512	1523	1533	1542		Remarks:
pH (SU)	5.77	5.87	5.65	5.63		
WATER TEMPERATURE (°C.)	18	18	18	18		
SP. CONDUCTIVITY (UMHOS/CM)	60	50	50	50		
TURBIDITY (SUBJECTIVE)*	1	1	1	1		
ODOR (SUBJECTIVE)**	1	1	1	1		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

** 1 = NONE 2 = FAINT 3 = MODERATE 4 = STRONG

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Field Data Information Sheet For Groundwater Sampling

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Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 2 1999**	Casing Diameter: 2 inches	Casing Material: (PVC) - Metal
Field Personnel	**GWS, (MPQ)**	Guard Pipe: PVC - (Metal) - No	Locking Cap: (Y) - N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - (N)	Integrity Satisfactory: (Y) - N
Well ID #	A-3	Well Yield: Low (Mod) - High	
Weather Conditions	OVERCAST Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	73.10		
Depth To Groundwater (DGW) =	30.85	MIDDLE WELL IN CLUSTER	
Length Of Water Column (LWC) =	42.25		
1 Casing Volume (OCV) = LWC x	0.163 = 6.9 gal.		
3 Casing Volumes =	20.7 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	(TB) SSB WW GP Other_____		
Method of Sample Collection	(TB) SSB WW GP Other_____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1ST	6.9	14.	20.7		WELL SAMPLE TIME: 1145
TIME (24 HOUR SYSTEM)	1100	1108	1116	1124		Remarks:
pH (SU)	5.75	5.40	5.01	5.04		
WATER TEMPERATURE (°C.)	15.	15	15	15		
SP. CONDUCTIVITY (UMHOS/CM)	15	15	15	15		
TURBIDITY (SUBJECTIVE)*	1	1	1	1		
ODOR (SUBJECTIVE)**	1	1	1	1		

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

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Field Data Information Sheet For Groundwater Sampling

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Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 4 1999**	Casing Diameter: 4 inches	Casing Material: PVC - Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC - Metal - No	Locking Cap: Y - N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y - N	Integrity Satisfactory: Y - N
Well ID #	GW-6	Well Yield: Low - Mod. - High	
Weather Conditions	Clear, Windy Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	28.40		
Depth To Groundwater (DGW) =	2.65	Dry at 16.8 gals	
Length Of Water Column (LWC) =	25.75		
1 Casing Volume (OCV) = LWC x	0.652 = 16.8 gal.		
3 Casing Volumes =	50.4 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW GP Other____		
Method of Sample Collection	TB SSB WW GP Other____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters

1.5" = 0.092	5" = 1.02
2" = 0.163	6" = 1.47
3" = 0.367	7" = 2.00
4" = 0.652	8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	16.8				WELL SAMPLE TIME: 1448
TIME (24 HOUR SYSTEM)	1430	1440				Remarks:
pH (SU)	6.38	6.47				
WATER TEMPERATURE (°C.)	17	19				
SP. CONDUCTIVITY (UMHOS/CM)	200	200				
TURBIDITY (SUBJECTIVE)*	1	1				
ODOR (SUBJECTIVE)**	1	1				

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

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Field Data Information Sheet For Groundwater Sampling

Page ____ of ____

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Cayce, S.C. 29033

Date (MM-DD-YY)	**February 4 1999**	Casing Diameter: 2 inches	Casing Material: (PVC) Metal
Field Personnel	**GWS, MPQ**	Guard Pipe: PVC (Metal) - No	Locking Cap: (Y) N
Facility Name	**NEVADA GOLDFIELDS, INC.**	Protective Abutment: Y (N)	Integrity Satisfactory: (Y) N
Well ID #	B-2	Well Yield: Low - Mod. (High)	
Weather Conditions	Clear, Windy Air Temperature °C.	Remarks:	
Total Well Depth (TWD) =	121.00		
Depth To Groundwater (DGW) =	19.65		
Length Of Water Column (LWC) =	101.35		
1 Casing Volume (OCV) = LWC x	0.163 = 16.52 gal.		
3 Casing Volumes =	49.56 gal. = Standard Evacuation Volume		
Total Volume of Water Removed =	gal.		
Method of Well Evacuation	TB SSB WW (GP) Other____		
Method of Sample Collection	(TB) SSB WW GP Other____		

Evacuation and Collection Methods
TB - Teflon Bailer
SSB - Stainless Steel Bailer
WW - Well Wizard
GP - Grunfos Pump

Constants for Casing Diameters
1.5" = 0.092
2" = 0.163
3" = 0.367
4" = 0.652
5" = 1.02
6" = 1.47
7" = 2.00
8" = 2.61

FIELD ANALYSES

VOLUME PURGED (GALLONS)	1st	16.52	33.04	49.56	
TIME (24 HOUR SYSTEM)	1325	1336	1350	1404	
pH (SU)	6.81	6.88	6.95	6.84	
WATER TEMPERATURE (°C.)	20	19	18	18	
SP. CONDUCTIVITY (UMHOS/CM)	230	210	200	200	
TURBIDITY (SUBJECTIVE)*	1	1	1	1	
ODOR (SUBJECTIVE)**	1	1	1	1	

WELL SAMPLE TIME: 1418

Remarks:

* 1 = CLEAR 2 = SLIGHT 3 = MODERATE 4 = HIGH

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ANALYTICAL METHODOLOGY

NEVADA GOLDFIELDS
McCormick, SC

PARAMETER	EPA METHOD
TDS	160.1
Nitrate	353.2
Nitrite	354.1
Alkalinity-Bicarbonate	SM4500D
Ammonia-N	350.3
Chloride	300.0
Sulfate	300.0/375.4
TOC	415.1
Cyanide	335.2
Fluoride	300.0
Metals: Mercury	7470A
Diss. Metals	6010B
Total Metals (All others)	6010B